

*wavelength that is absorbed preferentially by the neoplastic tissue relative to adjacent tissue.*

This is indeed a positive recitation and a limitation on the scope of the claim, differentiating the claim from the mere irradiation of a portion of a living organism. Applicant's arguments have not referred to "the presence of a photosensitizer to alter the absorption wavelength" and accordingly the examiner's reference to such a sensitizer is irrelevant. The examiner's reference to the wavelength selection method described in Applicant's specification is also irrelevant.


While Applicant's specification does indeed disclose how a wavelength meeting the recitation in the claim is selected, this disclosure serves as an enabling disclosure but not a required step, since the manner in which the proper wavelength is determined is not limited to that described in the specification, and the selection process itself is not part of the claimed method. Claim 1 does not recite the generalized irradiation of an organism (or a portion thereof) as the Office Action indicates, but instead a limited form of irradiation, limited by the definition of the wavelength that is explicitly and positively recited in the claim. The Office Action is also wrong in stating that "There is no requirement that the absorption characteristics are limited to endogenous elements." The requirement is expressly stated in the limitation on the wavelength, i.e., *a wavelength that is absorbed preferentially by the neoplastic tissue relative to adjacent tissue.*

The Nordquist et al. patent does not anticipate or suggest this limitation, but instead selects the wavelength as one that will be absorbed by a foreign substance injected into the tissue. The radiation in Nordquist is not absorbed by the neoplastic tissue at all but instead by a chromophore that is injected into the neoplastic tissue, and by an immunoadjuvant that is injected into the tissue together with the chromophore. This is explicitly set forth in the last paragraph of column 5 and the first paragraph of column 6 of Nordquist et al. The wavelength of the radiation is "complementary to that of the chromophore" (column 6, line 5), and whether or not it is also absorbed by the native tissue, it does not differentiate between the neoplasm and the healthy tissue. This differentiation is instead achieved by a combination of two localization features. The first is the localization of the chromophore in the neoplastic tissue, and the second is the localized use of a laser trained on the neoplastic tissue. Localization of the chromophore is achieved either by injecting the chromophore into the center of the tumor or by conjugation of the chromophore to a neoplastic tissue-specific antibody or antigen and systemically injecting the

conjugate into the organism -- see the description in the paragraph bridging columns 7 and 8. The immunoadjuvant is localized in the same way, and its purpose is to stimulate an immune response to the neoplastic antigens. Localized irradiation is achieved by the positioning of the laser -- see column 11, lines 30-38, describing how the laser is carefully moved along the entire surface of the tumor to irradiate it from all sides. None of these methods involve the use of a wavelength that is specifically chosen to be absorbed by the neoplastic tissue itself, i.e., to use Applicant's explicit claim wording, "*a wavelength that is absorbed preferentially by said neoplastic tissue relative to adjacent tissue*".

Applicant therefore reiterates that the invention as claimed in claims 1-8 is neither anticipated nor rendered obvious by the disclosure of Nordquist et al., and therefore patentably distinct. Accordingly, reconsideration of this rejection is requested.

Respectfully submitted,

  
M. Henry Helmes  
Reg. No. 28,219

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 415-576-0200  
Fax: 415-576-0300  
MHH:mhh  
60836357 v1